

WHAT IS CLAIMED IS:

1. A method of manufacturing a web having an applied pattern of add-on material, said method comprising:

moving a base web along a first path;

preparing a slurry of add-on material; and

repetitively discharging said slurry of add-on material upon said moving base web, said step of preparing a slurry of add-on material including:

cooking a fibrous cellulosic material,

bleaching the material,

pressing the cooked and bleached material to remove liquid,

drying the pressed material,

milling the dried material to produce fibers of a desired size, and

mixing the milled material with water to hydrate the material and produce a slurry.

2. The method according to claim 1, wherein said step of repetitively discharging said add-on slurry comprises:

continuously moving a belt having an orifice along an endless path, said belt moving step including the step of moving said belt along a first portion of said endless path where said orifice is communicated with a reservoir so as to discharge said add-on slurry from said reservoir through said orifice onto said base web as said orifice traverses said first path portion.

3. The method according to claim 1, wherein said fibrous cellulosic material comprises flax straw feed stock.

4. The method according to claim 3 further including:
subjecting the flax straw feed stock to a process for removing non-fibrous component including shive before the step of cooking the fibrous cellulosic material.
5. The method according to claim 4, wherein the process for removing the non-fibrous component is preformed in a hammer mill.
6. A method of producing a slurry of fibrous cellulosic material effective for application to designated regions on cigarette paper to affect the burn rate of the cigarette paper in the designated regions, the method comprising:
cooking a fibrous cellulosic material;
bleaching the material;
pressing the cooked and bleached material to remove liquid;
drying the pressed material;
milling the dried material to produce fibers of a desired size; and
mixing the milled material with water to hydrate the material and produce a slurry of the material.
7. The method according to claim 6, wherein the fibrous cellulosic material is produced from flax straw.
8. The method according to claim 7 further including:
subjecting the flax straw to a process for removing non-fibrous component including shive before the step of cooking the fibrous cellulosic material.

9. The method according to claim 8, wherein the process for removing the non-fibrous component is performed in a hammer mill.

10. A method of processing feed stock to produce a fibrous cellulosic material having a narrow range of fiber sizes suitable for application to designated regions on cigarette paper, the method comprising:

subjecting the feed stock to a hammering process for removal of non-fibrous components from the feed stock;

cooking the processed feed stock;

bleaching the feed stock;

pressing the cooked and bleached feed stock to remove liquid;

drying the pressed feed stock, and

milling the dried feed stock to produce the fibrous cellulosic material having a narrow range of fiber sizes.

11. The method according to claim 10, wherein the feed stock is derived from flax straw.

12. The method according to claim 10, further including the steps of blending the milled feed stock with water to hydrate the feed stock and produce a slurry, and passing the slurry through a double-disk refiner.

13. A system for processing feed stock to produce a fibrous cellulosic material having a narrow range of fiber sizes suitable for application to designated regions on cigarette paper, the system comprising:

a station at which a cellulosic feed stock is cooked;

a station at which the feed stock is bleached;

a press that presses the cooked and bleached feed stock to remove liquid;
a station at which the pressed feed stock is dried; and
a grinding machine that grinds the dried feed stock to produce the
fibrous cellulosic material having a narrow range of fiber sizes.

14. The system according to claim 13, wherein:
the grinding machine grinds the feed stock until the weighted average
fiber length is in the range from approximately 0.5 to 1 mm.

15. The system according to claim 14, wherein:
the grinding machine grinds the feed stock until the weighted average
fiber length is approximately 1 mm.

16. The system according to claim 13, further including:
a station at which the feed stock is hammered to remove non-fibrous
components before being passed to the station at which the feedstock is cooked.

17. The system according to claim 16, wherein:
the grinding machine grinds the feed stock until the weighted average
fiber length is in the range from approximately 0.5 to 1 mm.

18. The system according to claim 17, wherein:
the grinding machine grinds the feed stock until the weighted average
fiber length is approximately 1 mm.

19. The system according to claim 13, further including:

a station at which the ground feed stock is blended with water to hydrate the feed stock and produce a slurry.

20. The system according to claim 19, further including:
a double-disk refiner through which the slurry is passed before being applied to the designated regions on cigarette paper.

21. The system according to claim 20, wherein:
the grinding machine grinds the feed stock until the weighted average fiber length is in the range from approximately 0.5 to 1 mm.

22. The system according to claim 21, wherein:
the grinding machine grinds the feed stock until the weighted average fiber length is approximately 1 mm.